

CLAIMS

1. (Currently Amended) Telecommunications apparatus between a voice frame network gatekeeper and an intelligent peripheral in a packet switched network, the apparatus comprising:

a voice frame network connection for coupling the gatekeeper to the intelligent peripheral over the packet switched network; and

said connection provides supplemental services messaging between the gatekeeper and the intelligent peripheral in accordance with a International H.450 standard protocol, said protocol enabling the gatekeeper to operate as a supplemental services provider (SSP) under the International H.450 standard to selectively insert one or more messages to the intelligent peripheral and to selectively intercept one or more messages from the intelligent peripheral, where the supplemental services messaging exchanges non-call associated signaling including a password or a personal identification number between the gateway and the intelligent peripheral.

2. (Previously presented) The apparatus of claim 1, wherein said protocol further enables a selective insertion of one or more messages to the gatekeeper.

3. (Original) The apparatus of claim 2, wherein such selective insertion of one or more messages to the gatekeeper includes selective insertion of one or more release complete (RELCOM) messages in accordance with the International ITU-T H.323 standard.

4. (Currently Amended) The apparatus of claim 1, wherein such selective insertion of one or more messages to by the gatekeeper including selectively inserting one or more send-to-resource (STR) messages in accordance with the GR-1129-CORE standard over the packet switched network.

5. (Original) The apparatus of claim 1, wherein such selective interception includes selective interception of one or more facility (FACILITY) messages in accordance with the International ITU-T H.323 standard.

6. (Original) The apparatus of claim 5, wherein at least one of the one or more FACILITY messages includes a return results (RETURN RESULTS) component.

7. (Currently Amended) The apparatus of claim 1 which further comprises:
a service control point operatively connected to the gatekeeper and to a database, said service control point providing information contained in said database to the gatekeeper in response to a query therefrom, where the information includes the non-call associated signaling.

8. (Currently Amended) Telecommunications apparatus for coordinating a voice frame network gatekeeper and an interactive voice response unit including a performance mechanism for performing a defined task responsive to the gatekeeper, the apparatus comprising:

a voice frame network connection for coupling the gatekeeper to the interactive voice response unit;

an invocation mechanism within the gatekeeper for setting a defined task to the interactive voice response unit via in-band signaling; and

a protocol enforcing processor that provides supplemental services messaging between the gatekeeper and the intelligent peripheral over said interface processor, said enabling the gatekeeper to selectively insert one or more messages to the interactive voice response unit and to selectively intercept one or more messages from the interactive voice response unit, where the supplemental services messaging exchanges non-call associated signaling including a password or a personal identification number between the gateway and the intelligent peripheral.

9. (Original) The apparatus of claim 8, wherein said invocation mechanism and said performance mechanism comply with International ITU-T H.323 and H.450 standards.

10. (Original) The apparatus of claim 9, wherein said processor further enables selective insertion of one or more messages to the gatekeeper.

11. (Original) The apparatus of claim 10, wherein such selective insertion of one or more messages to the gatekeeper includes selective insertion of one or more release complete (RELCOM) messages in accordance with the International ITU-T H.323 standard.

12. (Previously presented) Telecommunications apparatus for coordinating a voice frame network gatekeeper and an interactive voice response unit including a performance mechanism for performing a defined task responsive to the gatekeeper, the apparatus comprising:

a voice frame network connection for coupling the gatekeeper to the interactive voice response unit;

an invocation mechanism within the gatekeeper for setting a defined task to the interactive voice response unit via in-band signaling; and

a protocol enforcing processor that provides supplemental services messaging between the gatekeeper and the intelligent peripheral over said interface processor, said enabling the gatekeeper to selectively insert one or more messages to the interactive voice response unit and to selectively intercept one or more messages from the interactive voice response unit;

wherein said invocation mechanism and said performance mechanism comply with International ITU-T H.323 and H.450 standards, said processor further enables selective insertion of one or more messages to the gatekeeper, and such selective insertion of one or more messages to the gatekeeper includes selective insertion of one or more release complete (RELCOM) messages in accordance with the International ITU-T H.323 standard such selective insertion of one or more messages to the interactive voice response unit including selective insertion of one or more send-to-resource (STR) messages in accordance with the GR-1129-CORE standard.

13. (Original) The apparatus of claim 12, wherein such selective insertion of one or more messages to the gatekeeper includes selective insertion of one or more facility (FACILITY) messages in accordance with the International ITU-T H.323 standard.

14. (Currently Amended) A method of interfacing a voice frame network gatekeeper and an interactive voice response unit (IVR) configured as an intelligent peripheral under International H.450 standard with a service control point (SCP), the method comprising:

configuring the gatekeeper as a supplemental services provider (SSP) under International H.450 standard;

first conveying requests from the gatekeeper to the IVR over the voice frame network in accordance with a defined protocol, where the IVR transmits previously recorded audio data over the voice frame network responsive to at least one of the requests; and

receiving responses to the requests from the IVR at the gatekeeper over the voice frame network in accordance with a defined protocol;

wherein the gatekeeper selectively intercepts one or more messages from the IVR.

15. (Original) A method of claim 14, which further comprises:

configuring the IVR as an intelligent peripheral under International H.450 standard;

and

second conveying responses to the requests from the IVR to the gatekeeper over the voice frame network in accordance with a defined protocol.

16. (Original) The method of claim 14, wherein the gatekeeper selectively inserts one or more messages to the IVR.

17. (Previously presented) A method of interfacing a voice frame network gatekeeper and an interactive voice response unit (IVR) configured as an intelligent peripheral under International H.450 standard with a service control point (SCP), the method comprising:

configuring the gatekeeper as a supplemental services provider (SSP) under International H.450 standard;

first conveying requests from the gatekeeper to the IVR over the voice frame network in accordance with a defined protocol; and

receiving responses to the requests from the IVR at the gatekeeper over the voice frame network in accordance with a defined protocol,

wherein the gatekeeper selectively intercepts one or more messages from the IVR, the gatekeeper selectively inserts one or more messages to the IVR, and such selective interception includes selective interception of one or more facility (FACILITY) messages in accordance with the International ITU-T H.323 standard, and wherein such selective insertion includes selective insertion of one or more send-to-resource (STR) messages in accordance with the GR-1129-CORE standard.

18. (Currently Amended) A computer-readable medium containing a program for interfacing a voice frame network gatekeeper and an interactive voice response unit (IVR) configured as an intelligent peripheral under International H.450 standard with a service control point (SCP), the program comprising:

instructions for configuring the gatekeeper as a supplemental services provider (SSP) under International H.450 standard;

instructions for first conveying requests from the gatekeeper to the IVR over the voice frame network in accordance with a defined protocol, where the IVR transmits previously recorded audio data over the voice frame network responsive to at least one of the requests.

instructions for receiving responses to requests from the IVR at the gatekeeper over the voice frame network in accordance with a defined protocol; and

instructions for selectively intercepting one or more messages from the IVR and for selectively inserting one or more messages to the IVR.

19. (Original) A computer-readable medium of claim 18, wherein the program further comprises:

instructions for configuring the IVR as an intelligent peripheral under International H.450 standard; and

instructions for second conveying responses to requests from the IVR to the gatekeeper over the voice frame network in accordance with a defined protocol.

20. (Previously presented) A computer-readable medium containing a program for interfacing a voice frame network gatekeeper and an interactive voice response unit (IVR) configured as an intelligent peripheral under International H.450 standard with a service control point (SCP), the program comprising:

instructions for configuring the gatekeeper as a supplemental services provider (SSP) under International H.450 standard;

instructions for first conveying requests from the gatekeeper to the IVR over the voice frame network in accordance with a defined protocol;

instructions for receiving responses to requests from the IVR at the gatekeeper over the voice frame network in accordance with a defined protocol; and

instructions for selectively intercepting one or more messages from the IVR and for selectively inserting one or more messages to the IVR, wherein said instructions for

selectively intercepting includes instructions for selectively intercepting one or more facility (FACILITY) messages in accordance with the International ITU-T H.323 standard, and wherein said instructions for selectively inserting includes instructions for selectively inserting one or more send-to-resource (STR) messages in accordance with the GR-1129-CORE standard.

21. (Currently Amended) Apparatus for interfacing a voice frame network gatekeeper and an interactive voice response unit (IVR) configured as an intelligent peripheral under the International H.450 standard with a service control point (SCP), the apparatus comprising:

means for configuring the gatekeeper as a supplemental services provider (SSP) under the International H.450 standard;

means for first conveying requests from the gatekeeper to the IVR over the voice frame network in accordance with a defined protocol, said first conveying means including software instructions resident on a computer-readable medium and executable by a processor within the gatekeeper;

means for receiving responses to requests from the IVR at the gatekeeper over the voice frame network in accordance with a defined protocol, said receiving means including software instructions resident on a computer-readable medium and executable by a processor within the gatekeeper; and

means for selectively intercepting one or more messages from the IVR and for selectively inserting one or more messages to the IVR, said selective-intercepting-and-inserting means including software instructions resident on a computer-readable medium and executable by a processor within the gatekeeper,

where at least one of the conveyed requests or received responses includes non-call associated signaling including a password or a personal identification number.

22. (Original) The apparatus of claim 21 which further comprises:

means for configuring the IVR as an intelligent peripheral under the International H.450 standard; and

means for second conveying responses to requests from the IVR to the gatekeeper over the voice frame network in accordance with a defined protocol, said second conveying

means including software instructions resident on a computer-readable medium and executable by a processor within the IVR.

23. (Previously presented) Apparatus for interfacing a voice frame network gatekeeper and an interactive voice response unit (IVR) configured as an intelligent peripheral under the International H.450 standard with a service control point (SCP), the apparatus comprising:

means for configuring the gatekeeper as a supplemental services provider (SSP) under the International H.450 standard;

means for first conveying requests from the gatekeeper to the IVR over the voice frame network in accordance with a defined protocol, said first conveying means including software instructions resident on a computer-readable medium and executable by a processor within the gatekeeper;

means for receiving responses to requests from the IVR at the gatekeeper over the voice frame network in accordance with a defined protocol, said receiving means including software instructions resident on a computer-readable medium and executable by a processor within the gatekeeper; and

means for selectively intercepting one or more messages from the IVR and for selectively inserting one or more messages to the IVR, said selective-intercepting-and-inserting means including software instructions resident on a computer-readable medium and executable by a processor within the gatekeeper,

wherein said means for selectively intercepting includes means for selectively intercepting one or more facility (FACILITY) messages in accordance with the International ITU-T H.323 standard, and wherein said means for selectively inserting includes means for selectively inserting one or more send-to-resource (STR) messages in accordance with the GR-1129-CORE standard.